Tel.X
Technical data

Tel.X Physical properties

Cell type	Voltage	Nominal capacity	Rated capacity	Maximum dimensions						Weight per block	
				L		W		H			
	V	C_8 Ah*	C_5 Ah**	mm	in	mm	in	mm	in	kg	lbs
TLX 80-3	3.6	75	83	128	5.03	105	4.13	254	10	5.8	12.7
TLX 80-4	4.8	75	83	168	6.62	105	4.13	254	10	7.9	17.3
TLX 80-5	6.0	75	83	209	8.22	105	4.13	254	10	9.9	21.9
TLX 80-6	7.2	75	83	249	9.82	105	4.13	254	10	12.0	26.5
TLX 80-7	8.4	75	83	290	11.41	105	4.13	254	10	14.0	30.9
TLX 80-8	9.6	75	83	330	13.01	105	4.13	254	10	15.9	35.1
TLX 80-9	10.8	75	83	371	14.61	105	4.13	254	10	17.9	39.4
TLX 80-10	12.0	75	83	412	16.20	105	4.13	254	10	19.7	43.5
TLX 100-3	3.6	97	103	153	6.03	105	4.13	254	10	7.4	16.4
TLX 100-4	4.8	97	103	202	7.96	105	4.13	254	10	9.8	21.7
TLX 100-5	6.0	97	103	251	9.89	105	4.13	254	10	12.2	26.9
TLX 100-6	7.2	97	103	300	11.82	105	4.13	254	10	14.6	32.1
TLX 100-7	8.4	97	103	349	13.76	105	4.13	254	10	16.8	37.0
TLX 100-8	9.6	97	103	398	15.69	105	4.13	254	10	19.2	42.2
TLX 100-9	10.8	97	103	447	17.62	105	4.13	254	10	21.5	47.5
TLX 100-10	12.0	97	103	497	19.55	105	4.13	254	10	23.9	52.7
TLX 150-3	3.6	140	152	209	8.22	105	4.13	254	10	10.4	23.0
TLX 150-4	4.8	140	152	277	10.89	105	4.13	254	10	13.5	29.9
TLX 150-5	6.0	140	152	344	13.55	105	4.13	254	10	16.7	36.7
TLX 150-6	7.2	140	152	412	16.21	105	4.13	254	10	19.9	44.0
TLX 150-7	8.4	140	152	479	18.87	105	4.13	254	10	23.0	50.8
TLX 150-8	9.6	140	152	547	21.54	105	4.13	254	10	26.0	57.3
TLX 180-3	3.6	172	185	250	9.86	105	4.13	254	10	11.7	25.8
TLX 180-4	4.8	172	185	332	13.07	105	4.13	254	10	16.0	35.4
TLX 180-5	6.0	172	185	413	16.28	105	4.13	254	10	19.9	43.9
TLX 180-6	7.2	172	185	495	19.49	105	4.13	254	10	23.7	52.3
TLX 180-7	8.4	172	185	576	22.70	105	4.13	254	10	27.5	60.6

** Obtained after prolonged float constant voltage charge of 1.45 V/cell at + 25°C (+ 77°F) and available charge current of 0.15 C_8A, followed by a discharge of 8 h at + 25°C (+ 77°F) down to 1.1 V/cell*

*** According to IEC 60623*

Battery rack assembly

Tel.X batteries can be assembled into modular and scable systems either at 24 V or 48 V. Available in standard 19" and 23" rack, the systems are custom fit for the overall Tel.X battery range. In option, these equipements can be also offered to resist to Seismic Zone 4 caracteristics.
With such systems, Saft is able to provide a turnkey solution which significantly reduces the floor loading compared to VRLA.

Tel.X discharge data - Amperes

Performance in ampere after prolonged float constant voltage charge between 1.43 to 1.45 V/cell at + 20°C to + 25°C (+ 68°F to + 77°F) available charge current 0.15 C_8A

Final voltage	Cell type	C_8 Ah *	Hours									
			1	2	3	4	5	8	10	12	18	24
1.00 V/cell	TLX 80	75	58.0	35.2	24.7	19.0	15.3	9.9	7.9	6.6	4.4	3.3
	TLX 100	97	73.9	45.6	32.0	24.5	19.7	12.8	10.3	8.6	5.7	4.3
	TLX 150	140	101.0	66.4	46.2	35.4	28.5	18.5	14.9	12.4	8.3	6.2
	TLX 180	172	122.9	81.7	56.7	43.5	35.1	22.8	18.3	15.3	10.2	7.6
1.05 V/cell	TLX 80	75	50.6	33.7	24.0	18.5	14.9	9.7	7.8	6.5	4.3	3.2
	TLX 100	97	64.7	43.7	30.9	23.9	19.3	12.6	10.1	8.4	5.6	4.2
	TLX 150	140	89.7	63.0	44.3	34.5	27.9	18.2	14.6	12.2	8.1	6.1
	TLX 180	172	109.4	77.4	54.4	42.4	34.2	22.3	17.9	15.0	10.0	7.5
1.10 V/cell	TLX 80	75	44.8	31.2	22.5	17.7	14.4	9.3	7.6	6.3	4.2	3.1
	TLX 100	97	57.5	40.0	29.0	23.0	18.6	12.1	9.8	8.2	5.4	4.1
	TLX 150	140	81.2	56.4	41.6	33.2	26.9	17.5	14.2	11.8	7.9	5.9
	TLX 180	172	99.3	69.0	51.0	40.7	33.0	21.5	17.4	14.6	9.7	7.3
1.14 V/cell	TLX 80	75	39.6	27.5	20.7	16.6	13.7	9.1	7.3	6.1	4.1	3.0
	TLX 100	97	50.1	35.2	26.8	21.8	17.7	11.8	9.5	7.9	5.3	3.9
	TLX 150	140	66.8	49.0	38.4	31.4	25.6	17.0	13.7	11.4	7.6	5.7
	TLX 180	172	80.8	59.8	47.1	38.6	31.5	20.9	16.8	14.0	9.4	7.0

Tel.X discharge data - Watts

Performance in watts after prolonged float constant voltage charge between 1.43 to 1.45 V/cell at + 20°C to + 25°C (+ 68°F to + 77°F) available charge current 0.15 C_8A

Cell type	Cell type	C_8 Ah *	Hours									
			1	2	3	4	5	8	10	12	18	24
1.00 V/cell	TLX 80	75	59.4	40.1	29.1	23.2	18.8	12.3	9.9	8.2	5.5	4.1
	TLX 100	97	75.7	52.0	38.1	29.9	24.2	15.9	12.8	10.7	7.1	5.4
	TLX 150	140	103.3	75.8	55.1	43.1	35.0	23.1	18.6	15.5	10.5	7.7
	TLX 180	172	125.8	93.1	67.5	53.0	43.1	28.4	22.9	19.2	12.8	9.5
1.05 V/cell	TLX 80	75	54.1	39.3	28.9	22.6	18.3	12.1	9.7	8.1	5.4	4.0
	TLX 100	97	69.2	51.0	37.1	29.1	23.7	15.7	12.7	10.5	7.0	5.3
	TLX 150	140	95.8	73.5	53.3	42.2	34.3	22.7	18.2	15.3	10.3	7.7
	TLX 180	172	116.9	90.3	65.4	51.7	42.0	27.7	22.4	18.8	12.5	9.4
1.10 V/cell	TLX 80	75	50.0	36.8	27.2	21.6	17.8	11.8	9.5	7.9	5.3	3.9
	TLX 100	97	64.1	47.2	35.0	28.2	22.9	15.3	12.2	10.2	6.8	5.2
	TLX 150	140	90.5	66.4	50.2	40.7	33.2	22.1	17.8	14.7	10.0	7.4
	TLX 180	172	110.7	81.4	61.6	49.8	40.7	27.2	21.8	18.2	12.2	9.2
1.14 V/cell	TLX 80	75	44.2	32.4	25.0	20.9	17.1	11.3	9.1	7.6	5.2	3.8
	TLX 100	97	55.8	41.5	32.4	27.2	22.1	14.7	11.9	9.9	6.6	4.9
	TLX 150	140	74.3	57.7	46.4	39.2	31.9	21.2	17.2	14.3	9.6	7.2
	TLX 180	172	90.1	70.5	56.9	48.1	39.3	26.0	21.0	17.5	11.8	8.9

* *Nominal capacity is obtained after prolonged float constant voltage charge (I-U) of 1.45 V/cell (at + 25°C / + 77°F) followed by a discharge (at the discharge rate corresponding to 8 h autonomy) down to 1.1 V/cell*

Power cable selection: The selection of power cables used within the installation of Saft Batteries is a function of:
1-Installation location; dry, damp or wet (as defined by the NEC code).
2-The maximum ambient operating temperature.
3-The maximum sustained current (amperage) applied during charge or discharge.

Saft's standard Tel.X product power cables are a #6 AWG rated for installations in dry or damp locations. The maximum operating ambient temperature of the Tel.X product is 50 °C. Based on a 50 °C max ambient temperature, the maximum sustained discharge current is 86 amps and a maximum available current limit of 150 amps during constant potential charging. When the application installation and operation exceeds the above parameters, then the design will require a careful review which may prescribe the need to move to higher ampacity rated power cables.